

REMARKS

Applicants have carefully reviewed the Office Action dated June 24, 2003. Applicants have amended Claims 1, 14, 16, 17, 28, 32, 33, 34, 36 and 40 to more clearly point out the present inventive concept. Claim 15 has been canceled to further the prosecution of this application. Reconsideration and favorable action is respectfully requested.

Claim 16 has been objected to as depending a canceled claim. This has been amended.

Claims 1-2, 6-11, 14, 16-17, 22-28, 32, 34-36, and 38-45 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of the *Hsieh et al.*, U. S. Patent No. 5,559,971 and *Mu et al.*, U. S. Patent No. 6,490,213 or the combination of *Hsieh* and *M. Morris*. This rejection is respectfully traversed with respect to the amended claims.

The Examiner has noted that all that the *Hsieh* reference discloses a matrix. However, the Examiner has correctly noted *Hsieh* does not explicitly assign or associate priority to each signal nor does *Hsieh* suggest that priority can be assigned and the configuration of the matrix can be such that there is a reason to prioritize an input signal. The reason for priority, is set forth in Applicants' present invention, is not to connect a signal in accordance with the priority but, rather, to prioritize the connection such that some connections are associated with the highest priority signals to be connected such that those connections can only be connected to that priority of the input. The Examiner has cited the *Mu et al.* reference as disclosing a cross-bar matrix which can prioritize the data transferring operation and that the *Wu* reference teaches how to route signals to respective destinations according to priority. However, the destination of the input signal is known *prior* to transmission of the input signal and it is merely an arbitration system that controls access to a destination port, i.e., this is essentially what is termed a "bus contention" system. There is no configuration information disclosed or suggested in the *Mu* reference. As such, *Mu* does not cure the deficiency *Hsieh* in that it does not show that there is a priority associated with one or more of the outputs or the inputs such that priority based inputs will only be associated with certain outputs and more low priority inputs can be

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associated with more outputs than high priority inputs. The Examiner has also cited *Mano* as teaching a cross-bar switch for the use in managing data transfer with appropriate priority settings. The Examiner has specifically referred to page 457, first paragraph. Again, this is a system that resolves multiple requests for access to a memory module on a priority data basis. The Examiner is correct in that none of the prior art references discloses any relationship between the number of destinations between the high priority signals and the low priority signals. The Examiner has stated that "such limitation is merely a matter of design choice and would have been obvious." Applicants disagree with this contention, since the configuration that allows certain inputs to be associated with certain outputs on a priority basis, such that there are more outputs for low priority signals, which allows a more compact and less complex cross matrix to be developed. This can be seen in the embodiment illustrated in Figure 2, and as disclosed in the specification associated therewith. Applicants have further clarified this in the claim language such that the association between output ports and inputs determines the number of ports that are "available" to that input and this association is one based upon priority. All of the cited references provide substantially the same number of inputs and outputs associated therewith. Therefore, each input has access to *all* of the outputs. Therefore, Applicants respectfully request withdrawal of the 35 U.S.C. §103 rejection with respect to the remaining claims.

Claims 3-5, 12-13, 18-21, 29-31, 33 and 37 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of *Hsieh*, *Hsieh et al.*, U. S. Patent No. 5,428,750 and *Mu* or *Mano*. This rejection is respectfully traversed with respect to the amended claims.

For the reasons described herein above, this combination of references does not cure the deficiencies described herein above in that none of the references, taken singularly or in combination, illustrate the configuration where the number of output destinations and the association between the output destinations and the inputs is based upon priority such that there are less outputs for high priority inputs than for low priority inputs. Therefore, Applicants respectfully request withdrawal of 35 U.S.C. 103(a) rejection with respect to Claims 3-5, 12-13, 18-21, 29-31, 33 and 37.

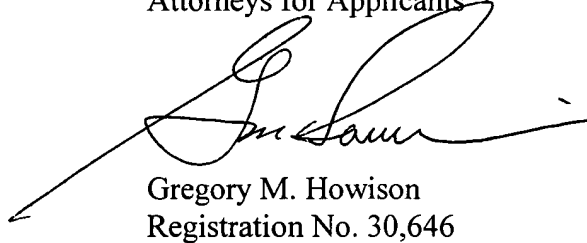
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Applicants have now made an earnest attempt in order to place this case in condition for allowance. For the reasons stated above, Applicants respectfully request full allowance of the claims as amended. Please charge any additional fees or deficiencies in fees or credit any overpayment to Deposit Account No. 20-0780/CYGL-24,696 of HOWISON & ARNOTT, L.L.P.

Respectfully submitted,
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